

10/517,090

10/517090

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 03/105339 A1(51) International Patent Classification⁷: **H03H 7/30**,
H04M 9/00, H04L 5/16

(21) International Application Number: PCT/US03/18004

(22) International Filing Date: 6 June 2003 (06.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/387,303	7 June 2002 (07.06.2002)	US
60/387,098	7 June 2002 (07.06.2002)	US
60/398,860	25 July 2002 (25.07.2002)	US
60/403,874	16 August 2002 (16.08.2002)	US

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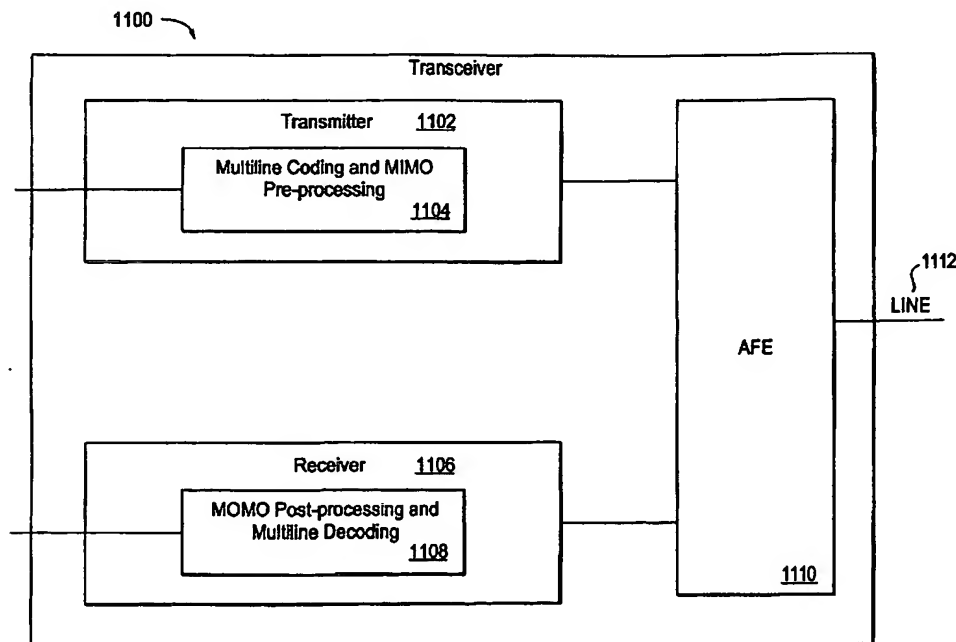
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[Continued on next page]

(54) Title: MULTILINE TRANSMISSION IN COMMUNICATION SYSTEMS



(57) Abstract: A method and system for multiline transmission in communications systems are described. A transmitter (1102) performs MIMO pre-processing (1104) on symbol vectors. A signal vector associated with the symbol vector is transmitted. A receiver (1106) performs MIMO post-processing (1108) on the received signal vectors to minimize the effects of crosstalk on pairs of lines in the multiline communications system.

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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, — *with amended claims*
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/18004

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H03H 7/30; H04M 9/00; H04L 5/16 US CL : 375/222, 229; 379/402, 417, 392.01 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 375/222, 229, 230; 379/402, 417, 392.01; 370/281, 286, 276 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CROSSTALK, DSL, EQUALIZER, MIMO, DMT		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,181,198 A (LECHLEIDER) 19 January 1993 (19.01.1993), column 6, line 52 - column 8, line 3	1
A	US 6,011,814 A (MARTINEZ et al.) 04 January 2000 (04.01.2000), column 2, line 30 - column 4, line 2	1
A	US 6,263,077 B1 (ZURANSKI et al.) 17 July 2001 (17.07.2001), column 13, line 18 - column 14, line 55	1
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 06 September 2003 (06.09.2003)	Date of mailing of the international search report 26 SEP 2003	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Young Tse Telephone No. 703-305-4736	